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NOTES ON NORTHERN MEXICAN BIRDS  
AN EXPEDITION REPORT

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and  
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INTRODUCTION

This report is based primarily on data obtained during a two-part expedition to northern Mexico, led by the junior author for the Delaware Museum of Natural History. The first part was in the period 12 October–30 December 1971, and the second from 24 March–28 May 1972. The emphasis was on the northern Plateau of Mexico and the adjacent mountains, in the states of Chihuahua, Durango, Coahuila, Nuevo León, and Sinaloa. One brief foray also was made into the Pacific coastal plain of Sinaloa. The reason for concentrating on the northern Plateau and adjacent mountains, and on the autumn-spring period, is that this region is poorly known, particularly outside the breeding season. As the result of the expedition a number of species were added to the state lists of the region, data were obtained on migrant and winter species, fresh-plumaged material for studies of geographic variation was obtained, and some interesting spring breeding records were secured. In addition, we take this occasion to describe a new race of *Aimophila ruficeps* from southeastern Sinaloa.

The data for this report are primarily from specimens, with some sight observations. Also included are a few pertinent records obtained in Sinaloa by Crossin in fieldwork carried out from 1964 to the present.

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rales of Durango. We also thank members of the expedition teams who made the venture a success, notably Ronald Galley, Abraham Ramírez, Sr., and Abraham Ramírez, Jr. Finally, we thank Charles Ely, David M. Niles, and Allan R. Phillips for reading drafts of this paper and providing constructive comments, and Ned K. Johnson, Roxie Laybourne, John Weske, and others for helping in identification or use of specimens.

Collections are cited as follows: AMNH—American Museum of Natural History; BMNH—British Museum (Natural History); CAS—California Academy of Science; DMNH—Delaware Museum of Natural History; MC—Moore Collection, Occidental College; NF—Neotropical Ornithological Foundation; UMMZ—University of Michigan Museum of Zoology; and USNM—United States National Museum of Natural History.

### LOCALITIES

In order to conserve space in citing localities, the following detailed listing is given, including brief ecological descriptions and dates of visitation. The localities given in small capital letters are the short-form designations used in the main text.

#### CHIHUAHUA

Hidalgo del PARRAL, 4 miles south-southeast on Highway 45; 6800 feet. Dry oak-grassland to grassland, with denser vegetation in the form of small oaks (*Quercus*), mesquite (*Prosopis*), and catclaw (*Acacia*) along the dry washes. Tiny man-made lake present, formed by damming up a streamlet—water appearing above ground only in spots. 30 October–1 November 1971.

MT. MOHINORA, 33 road miles southwest of El Vergel; 10,200 feet. Primarily dry pine (*Pinus*) forest with few scattered small (to 30 feet) oaks and occasional firs (*Abies*), the latter primarily restricted to the stream beds. The entire area logged of pine some years back, but an abundance of pine seedlings and trees of up to 1½ feet diameter is now present. Terrain primarily precipitous rocky canyons. 17–21 October 1971.

REPRESO EL TINTERO, 32 road miles south of Buenaventura; 5500 feet. Man-made lake approximately 6–7 miles long by about 1 mile wide; area completely denuded by grazing; trees nonexistent near the lake. Distant hills primarily covered by oak-grassland. 22–24 December 1971.

RIO SANTA BARBARA, 10 miles south of Hidalgo del Parral on Highway 45; 6500 feet. Large river bordered with big cottonwoods (*Populus fremontii*), pecans (*Carya*), and willows (*Salix*); mesquite and saltbrush (*Atriplex*) abundant in side washes. Entire area used for grazing or agriculture. 28 April–2 May 1972.

RIO VALLES, 2 miles north of Buenaventura; 5200 feet. Small, clear stream bordered by huge cottonwoods, mesquite, and saltbrush. Some agriculture, but primarily cattle grazing. Area very heavily grazed. 25–30 December 1971.

RIO VALLESA. 56 road miles southwest of Hidalgo del Parral; 6750 feet. Oak-grassland, with abundant small, shrubby willow, catclaw, wild grape (*Vitis*), and prickly pear cactus (*Opuntia*) along a small stream. Primarily pasturelands with agriculture along the floodplain. 22–29 October 1971.

## COAHUILA

PALO BLANCO, 14 miles north of Saltillo; 4400 feet. Small clear stream with saltbrush, willow, and few large ash trees (*Fraxinus*) along immediate border. Surrounding country extremely arid, with an array of low, closely spaced cacti, agave (*Agave*), and catclaw; somewhat more substantial vegetation along the dry washes in the form of mesquite and large treelike yuccas (*Yucca*). Entire area heavily grazed by large goat herds. 12–18 December 1971 and 10–12 May 1972.

PUENTE EL CHORRO (No. 2), 15 miles southeast of Saltillo on Highway 57; 6000 feet. Small clear stream bordered by luxurious growth of saltbrush and various marsh grasses. Surrounding hills quite arid with scattered agave, yucca, and low shrubs. A limited amount of cattle grazing. 13–14 May 1972.

## DURANGO

EL SALTO 1, 5 miles west; 7500-8200 feet. Clear stream meandering through cleared, heavily grazed meadows. Fairly dry, second growth pine forest with trees up to 35 feet in height; limited cutting of the few larger trees for lumber still in progress. Except for occasional patches of small willows, the stream is devoid of vegetation because of cattle grazing. 14 October 1971, 20–25 November 1971, and 24–28 March 1972.

EL SALTO 2, 13 miles west; 7500-8200 feet. Small clear stream running through a fairly dry, second growth pine forest with some trees up to 50 feet and more in height; as at El Salto 1, a limited amount of cutting of the larger trees is still in progress. A few small oaks and large old junipers (*Juniperus*) in sheltered canyon heads. Entire area heavily grazed and, except for a flowering composite (Compositae), the streamside is devoid of vegetation. Introduced trout (up to 12 inches) in stream, mostly restricted to the few pools. 21–28 May 1972.

LAGUNA DE SANTIAGUILLO, 10 miles north-northeast of Guatinapé; 6600 feet. Large, fairly shallow lake about 8 miles by 3 miles. Large patches of cattails (*Typha*) and tules (*Scirpus*) present in various parts of the lake. Shoreline heavily grazed except for the north side, which is largely fenced into sections for farming. A narrow peninsula supporting numerous huge cottonwoods and willows extends about a quarter mile into the lake on the north side. A combination of habitats (including abundant marshy shoreline, weedy fields, grain farming), as well as the lake being unmolested by boats, made this area the birdiest spot visited on the north-central plateau—with by far the greatest number and variety of land, water, and marsh birds encountered. 13–18 November 1971 and 19–24 April 1972.

PRESA SAN FRANCISCO ZARCO, 40 miles south of Torreón, Coah., and 8 miles west of Highway 40; 5000 feet. Bald-cypress (*Taxodium*) willow, and bamboo (Gramineae) thickets along a river. 18–20 May 1972.

RIO MEZQUITAL, 45 miles south-southeast of Durango; 4500 feet. River (minimum depth 3–4 feet) lined with large bald-cypress (up to 5 feet in diameter) and willows. Ridge above with abundant pinyon (*Pinus*), others with a few junipers and small oaks. Hillsides with desert shrub intermixed with cacti; tree tobacco (*Nicotiana*) in washes. 3–10 November 1971 and 30 March–4 April 1972.

RIO NAZAS, 16 miles southwest of Torreón, Coah.; 3800 feet. River lined with cottonwoods, willows, and saltbrush in patches, giving way to farmland in the valley. Hillsides with creosote bush (*Larrea*), agave, and scrub. 8–11 December 1971 and 15–18 May 1972.

TEPEHUANES, 2 miles southeast; 5900 feet. A small clear stream in hilly area in which are a few oaks and many junipers. 11–13 November 1971.

## NUEVO LEON

LA ESPERANZA, 15 miles east of San Antonio de las Alanzas, Coah.; 9000 feet. Dry canyon on south side of a mountain in pastureland. Pockets of short-leaved pines (pinyon?), 30–35 feet tall and scraggly, mixed with yuccas and agaves. Very dry habitat surrounded by farmland and other cleared areas. Yuccas widely blooming, while agaves—flower stalks about 15 feet tall—only sporadic, but attractive to birds. Dense scrub oak in a nearby canyon. 4–10 May 1972.

## SINALOA

CONCORDIA, 9 miles northeast; 1000 feet. River with a few large figs (*Ficus*) and other trees, with 20 foot high, partly cleared, and grazed thorn forest on hills. 14–17 April 1972.

RANCHO CARRIZO, 6 road miles west of Palmito; 6000 feet. Area of small oaks (up to 35 feet) and scattered pines; small spring present and farmland and other clearings are interspersed. Overgrown fields support dense blackberry (*Rubus*) thickets, which were bearing heavily in November. At that time also flowering were small plants with purple flowers (Labiatae?), epiphytes with tubular orange flower (Loranthaceae?), and madrone (*Arbutus*). Below is barranca that drops 500 and then 500–800 feet and contains lush growth. Whole area was wet in autumn. In spring it was drier, oaks and blackberries were in flower and growing new leaves, the madrone were in fruit, and orchids (*Taeallia*) were no longer in bloom. For a more complete description, see Crossin (1967). 12–14 October 1971, 26 November–6 December 1971; and 6–12 April 1972.

### ANNOTATED LIST

In the following accounts, only the short-form localities (shown in small capitals in the preceding descriptions) are employed, and the year is omitted from dates for the 1971–1972 expedition data: unless otherwise specified, all October–December records are in 1971 and March–May records are in 1972. In large part we have based our comments on the “Check-list of the Birds of Mexico” (Friedmann *et al.*, 1950; Miller *et al.*, 1957), here shortened to “Mexican Check-list,” as this is the most generally complete technical work on the birds of the Republic. In essence, this paper is meant to supplement that work, although where possible we have attempted to cite other relevant publications that have already supplemented it. In spite of its deficiencies and shortcomings, the Mexican Check-list is the most generally available and widely used work of its kind, particularly for such regions as the northern Plateau—on which so little has been published.

Measurements in the following text are metric, with the wing being the chord (unless otherwise specified). Various abbreviations are used, mostly of a standard nature. Examples include: t. = testes, ov. = ovary, s.n.o. = skull not ossified, etc. The order of species is largely that of the Mexican Check-list.

#### *Aechmophorus occidentalis* (Lawrence). Western Grebe

The Mexican Check-list records this species on the northern Plateau only from Chihuahua, but Crossin observed dozens in Durango on Laguna de Santiaguillo on 13–18 November and at least 2 there on 19–24 April.

#### *Pelecanus erythrorhynchus* Gmelin. White Pelican

The Mexican Check-list does not record this species from the north-

ern Plateau, but Crossin saw several at Laguna de Santiaguillo on 13–18 November and 1 on 19–24 April.

***Phalacrocorax olivaceus* (Humboldt). Olivaceous Cormorant**

The Mexican Check-list does not record this species from Durango, but Crossin saw 7 or more on the Río Mezquital on 30 March to 4 April.

***Chen caerulescens* (Linnaeus). Snow Goose**

The Mexican Check-list does not record this species from Durango, but Crossin saw thousands on Laguna de Santiaguillo on 13–18 November, with many still there on 19–24 April. In November, flocks of up to several hundred birds were seen to leave the lake shore in late afternoon, moving to feed in nearby pastures and grain fields. By early morning the flocks had reassembled on the lake shore. Hundreds of geese were also seen just to the north, at Peña del Aguila, in late October and early November.

***Anser albifrons* (Scopoli). White-fronted Goose**

The Mexican Check-list does not record this species in Durango, but Crossin saw thousands at Laguna de Santiaguillo on 13–18 November; he also saw 40 at Represo El Tintero, Chihuahua, on 23–24 December.

***Anas diazi* Ridgway. Mexican Duck**

In view of the recent seeming decline in this species (Aldrich and Baer, 1970), these observations by Crossin may be of interest: Chihuahua, 75–100 at Represo El Tintero on 20–26 December and about 15 at Río Santa Barbara on 28 April–2 May; Durango, large numbers at Laguna de Santiaguillo on 13–18 November and 9 or more there on 19–24 April.

***Aix sponsa* (Linnaeus). Wood Duck**

DGO.: Río Mezquital—♀, 3 April

The Mexican Check-list records this species in Mexico only from Sinaloa and the Distrito Federal. The above specimen shows no sign of having been in captivity, e.g., the plumage is not unduly worn.

***Mergus serrator* Linnaeus. Red-breasted Merganser**

The Mexican Check-list records this species only from Baja California and Sonora, but Crossin saw 3–5 at Represo El Tintero, Chihuahua, on 23–24 December.

***Coragyps atratus* (Bechstein). Black Vulture**

In view of the recent seeming decline of this species (A. R. Phillips, pers. comm.), these records by Crossin may be of interest: Chihuahua, 40–50 at Represo El Tintero on 26–30 December and about 20 at Río Santa Barbara on 28 April–2 May (these are apparently the first records of this species from Chihuahua); Sinaloa, 40–50 near Concordia

on 14–17 April; Durango, 4–5 at Río Mezquital on 30 March–4 April, about 60 at Presa San Francisco Zarco on 18–20 May, and 500 at Laguna de Santiaguillo on 13–18 November and 5–10 on 19–24 April. Over the same period, Turkey Vultures (*Cathartes aura* [Linnaeus]) were seen more widely but in generally smaller numbers. The maxima were 150–200 at Laguna de Santiaguillo on 13–18 November, with numbers elsewhere 20 or less per day. Winter records were obtained as far north as Chihuahua, i.e., 10–20 at Represo El Tintero on 23–24 December and 5–10 near Buenaventura on 26–30 December. The large numbers of both species of vultures at Laguna de Santiaguillo in November were presumably attracted by the dead and dying horses there, victims of a severe outbreak of encephalitis.

***Accipiter cooperii* (Bonaparte). Cooper's Hawk**

DGO.: Río Mezquital—im. ♂, 6 November

The Mexican Check-list does not record this species from Durango; Fleming and Baker (1963:276) list sight records near Boquillas in July.

***Buteo regalis* (G. R. Gray). Ferruginous Hawk**

The Mexican Check-list does not record this species from Chihuahua, but Crossin saw a light-phase adult near Babicora, about 60 km south of Buenaventura, on 21 December. The bird was perched on a telephone pole by the road, holding a ratlike rodent in its talons.

***Buteo brachyurus* Vieillot. Short-tailed Hawk**

Crossin observed a pair (one light- and one dark-phase bird) at Rancho Carrizo, Sinaloa, on numerous occasions in 1964. The Mexican Check-list does not record the species from Sinaloa.

***Pandion haliaetus* (Gmelin). Osprey**

The Mexican Check-list does not record this species from Durango, but Crossin saw 1 at Presa Francisco Zarco on 18–20 May. He was under the impression that a huge nest of sticks, about 50 feet up in a riparian *Taxodium*, belonged to the bird, but breeding in the interior of Mexico has not been confirmed.

***Falco peregrinus* Tunstall. Peregrine**

In view of the drastic decline of this species, the following records are of interest: Durango, at least 1 at Laguna de Santiaguillo on 13–18 November; Chihuahua, an adult ♀ (presumed) at Represo El Tintero on 22–24 December; and a ♀ (presumed) at Río Valles on 25–30 December. Not recorded by the Mexican Check-list from Chihuahua and Durango.

***Callipepla squamata* (Vigors). Scaled Quail**

COAH.: Palo Blanco—ad. ♂, ad. ♀, 2 juv. ♀ ♀, 11–12 May

The Mexican Check-list is somewhat unclear about the races occurring in southern Coahuila, but all of these birds are close to the nominate race (the May specimen shows some approach to *castanogastris* Brewster in belly color). Friedmann (1946:269-271), Amadon and Phillips (1947), and Urban (1959:459-460) also assign southern Coahuila birds to *C. s. squamata*.

***Grus canadensis* (Linnaeus). Sandhill Crane**

Additional records from Durango are of 40 seen by Crossin at Laguna de Santiaguillo on 13-18 November.

***Charadrius vociferus vociferus* Linnaeus. Killdeer**

COAH.: Palo Blanco—ad. ♂, ad. ♀, 2 juv. ♀♀, 11-12 May

The Mexican Check-list does not record this species as breeding in Coahuila, although Urban (1959:461) has reported a ♂ with enlarged testes taken in the extreme north.

***Calidris minutilla* (Vieillot). Least Sandpiper**

DGO.: Laguna de Santiaguillo—series, 23-24 April

The Mexican Check-list does not record the species from Durango.

***Recurvirostra americana* Gmelin. American Avocet**

The Mexican Check-list does not record this species from Durango, but Crossin saw about 20 at Laguna de Santiaguillo on 19-24 April.

***Zenaida asiatica* Linnaeus. White-winged Dove**

CHIH.: Parral—♀, 1 October

DGO.: Río Mezquital—3 ♀♀, 2 ♂♂, 1-4 April; 2 ♂♂, 4-9 November

SIN.: Concordia—♀, 15 April

We have attempted to identify these specimens subspecifically based on Saunders' (1968) review. The Sinaloa specimen is darker and browner than four of the five spring birds from Durango, being about equally dark but browner (less grayish brown) than the fifth. Saunders separated Pacific Coast populations of most of Mexico as a new race, *Z. a. palustris*, and the above color characters ally the Sinaloa bird with that form. In wing (156.0 mm) and culmen (21.5 mm) lengths there is also agreement, but the tail (108.0 mm) is slightly short for *palustris*. Saunders reports *palustris* as being essentially confined to mangrove areas, while the present specimen (ov. 9 × 7 mm, ova to 3 mm, no fat) was taken in thorn forest at about 1000 ft. elevation. Nevertheless, as far as we can determine, it is closer to *palustris* than to any other form.

Saunders (1968) also described as a new race, *Z. a. monticola*, the population breeding over most of the Mexican Plateau. The Durango birds all agree with the description and measurements of *monticola*, except that the culmens of two ♀♀ (18.0 and 18.6 mm) are below the minimum of 19.2 mm listed in Saunders. These ♀♀ are part of the spring



series from Río Mezquital and undoubtedly represent the local breeding form: all birds from there had enlarged gonads and one ♀ was taken at a nest. It remains to be seen whether *monticola* is truly separable from *mearnsi* (Ridgway), as the characters seem slight.

The Chihuahua specimen is somewhat discolored, but it is definitely dark. It may be *Z. a. asiatica*, but its wing (165.5 mm) and tail (113.0 mm) exceed the maxima listed by Saunders, i.e., 158.9 and 112.6 mm, respectively.

***Rhynchopsitta pachyrhyncha* (Swainson). Thick-billed Parrot**

Crossin saw this species only twice during the expedition: a maximum of 5 at Mt. Mohinora, Chihuahua, on 19–20 October and 2 at Rancho Carrizo, Sinaloa, on 7 April. Also in Sinaloa, at the nearby Rancho Liebre, Crossin observed a large flock of these birds from 7–19 May 1964. Initially, about 100 birds came at dusk to a canyon there, where they went to roost in crevices in the cliffs. Each morning they departed, flying southward. By the end of the period over 200 birds were in the flock. The species is not recorded from Sinaloa in the Mexican Check-list.

The Thick-billed Parrot is considered an endangered species by the U.S. government, and its numbers appear to have declined in recent years. This may well be due to heavy lumbering in the Sierra Madre Occidental, as well as to widespread failures of pine cone crops. In the summers of 1957–1961, Fleming and Baker (1963:281) did not see the species in the mountains of Durango, and we have similar reports of absence or scarcity from other observers.

***Piaya cayana mexicana* (Swainson). Squirrel Cuckoo**

SIN.: Rancho Carrizo—ad. ♂, 13 October; ad. ♀, 30 November

The Mexican Check-list does not record this species above 3500 ft. in Sinaloa, but these were taken at 6050 ft. in pine-oak woodland. In 11 years of fieldwork, Crossin has not previously encountered the species at this site.

***Otus flammeolus* (Kaup). Flammulated Owl**

SIN.: Rancho Carrizo—3 ad. ♂♂, 3–4 December (46.0, 48.5, 59.5 g; medium to heavy fat); ad. ♀, 2 ♂♂, 7–11 April (48, 50, 51 g; fat none to light)

N.L.: La Esperanza—ad. ♀, 5 May

The Mexican Check-list does not list this species from either of these states: moreover, the Nuevo León record is of a breeding bird—the only other in Mexico is in Veracruz, according to the Check-list. The breeding specimen is an adult ♀, which weighed 87 g and had heavy fat deposits. It was taken from a nest in a yucca, at 10,000 ft. in pine-yucca forest; it had three heavily incubated eggs. This and all but one of the Sinaloa

specimens are reddish, according to Marshall (1967), a characteristic of southern birds of the species. The exception is a gray ♂ taken at Rancho Carrizo on 4 December. It is similar to most U.S. birds and may be a northern migrant.

The Mexican Check-list treats *O. flammeolus* as a race of *O. scops* (Linnaeus), undoubtedly following Delacour (1941). Hubbard (1965) has pointed out that the two forms differ in voice and eye color, as well as in the traditionally appreciated features of size and plumage (see also Marshall 1966, 1967). Under the circumstances, and because owls less dissimilar than these occur as sympatric species, lumping *O. flammeolus* with *O. scops* seemed quite inappropriate.

***Otus asio suttoni* Moore. Screech Owl**

CHIH.: Río Valles—ad. ♂, 26 December

Río Santa Barbara—ad. ♀, ad. ♂, 30 and 28 April

The Mexican Check-list does not record this species from Chihuahua, although Marshall (1967) found it common there in several places.

***Otus trichopsis aspersus* (Brewster). Whiskered Owl**

SIN.: Rancho Carrizo—ad. ♂, 2 December

The Mexican Check-list does not record this species from Sinaloa, although Marshall (1967) reported specimens from there. On 23 May 1963, Crossin collected a pair of adults and the two eggs (NF) from their nest at Rancho Carrizo.

***Asio otus wilsonianus* (Lesson). Long-eared Owl**

N.L.: La Esperanza—ad. ♀, juv. ♀, 8 May

According to the Mexican Check-list, this species has not been found breeding in Mexico outside of northwestern Baja California. The adult listed above was one of a pair, while the juvenile was the only one found. It was in a hollow in a large yucca, in pine-yucca vegetation at about 9000 ft. The adult is rather dark and agrees with typical eastern North American birds. Western birds are often pale (as are some eastern birds) and have been separated as *A. o. tuftsi* Godfrey; that form is not recognized by the Mexican Check-list.

***Aegolius acadicus acadicus* (Gmelin). Saw-whet Owl**

DGO.: El Salto 2—ad. ♀, ad. ♂, 28 and 24 May (respective wts. 71 and 64 g, no fat, gonads small)

The Mexican Check-list does not record this species from Durango. From the late dates, these birds might have been expected to have remained in the area to breed. The ♂ is in tail molt, with the outer pair of rectrices about 10 percent grown, the next pair about 70 percent grown, and the inner ones in pin or missing.

**Caprimulgus vociferus Wilson. Whip-poor-will**

*C. v. arizonae* (Brewster)

SIN.: Rancho Carrizo—♂, 2 December (47.5 g, heavy fat)

This species is not recorded in winter in Sinaloa by the Mexican Check-list. As did Ridgway (1914:520), we find the separation of *arizonae* and *vociferus* on the basis of plumage characters to be tentative at best. Our specimen is browner above and has less heavily spotted scapulars than typical *vociferus*, thus agreeing more with *arizonae*. On the basis of size, especially the long rectal bristles, it is also nearer that race: wing 163.5, tail 118.0, bristles 45 mm. Craig (1971) has suggested another character to distinguish these races, i.e., the coloration of the rectal bristles: blackish in *vociferus* and blackish with brown at the base in *arizonae*. We find overlap in this character in specimens examined by us (DMNH, USNM), and the specimen listed above has blackish bristles. In view of the overlap in characters between the two races, we have considerable reservation about the California record of *C. v. vociferus* reported by Craig (1971); the bird was banded and released. Even with the direct comparison to specimens that was done, one cannot rule out the possibility that the bird was not a variant of *arizonae*. While it was short-winged, in the few specimens of breeding-season *arizonae* that we measured, some are smaller than those reported by Ridgway (1914) and nearly as small as the California bird.

*C. v. oaxacae* (Nelson)

SIN.: Rancho Carrizo—♂, 7 April (46 g, light fat, t.  $4 \times 3$  mm)

The Mexican Check-list records *oaxacae* as breeding northward to southern Guanajuato and Coahuila, and it states that the race is only a "slightly larger and darker" than *arizonae* and "nothing but a variable series of intermediates between" that race and *chiapensis* (Nelson). We are unable to evaluate the characters of size (our bird is small; i.e., wing 155.5, tail 112.5 mm), but specimens (USNM) of *oaxacae* differ from *arizonae* in more than just being darker. More importantly, they are more coarsely barred below (less vermiculated) and have the light markings of the posterior underparts more spotlike than either *arizonae* or *vociferus*. Above, they tend also to be more coarsely marked and, in general, darker and more rufescent. We find our specimen similar to the type (USNM) of *oaxacae* but paler; however, we understand why Ridgway (1914:520-521) limited *oaxacae* to Oaxaca, as none of his specimens (USNM) from north of there are as dark as the type. However, birds from as far north as Nuevo León show the coarse barring and spotlike ventral marking of *oaxacae*, as indicated by the treatment in the Mexican Check-list. On this basis, the specimen from Rancho Carrizo can also be assigned to *oaxacae*, as it is certainly as representative of that

race as specimens that we have seen from Nuevo León and Guerrero (USNM). Another specimen, taken in Durango at Río Mezquital ( $\delta$ , 4 November, 51.5 g, heavy fat), is essentially intermediate between *arizonae* and *oaxacae*, although, as also true of the Sinaloa specimen, it is small (wing 156.5, tail 115.0).

***Aeronautes saxatalis sclateri* Rogers. White-throated Swift**

CHIH.: Río Santa Barbara—ad. ♀, 30 April (ov.  $5 \times 3$  mm)

COAH.: Palo Blanco—ad. ♂, 11 May (t.  $4 \times 9$  mm)

This northern Rocky Mountain race is not recorded for Mexico by the Mexican Check-list, although obviously it is to be expected there as a migrant. Rogers (1939) gave wing lengths (arc) for *sclateri* as 142–155 mm ( $\bar{x}$  146.6) versus 128–145 mm ( $\bar{x}$  138.5) for the nominate race. Our specimens, which have the gonads small, measure 146.5 in the ♀ and 150 mm in the ♂. Ely (1962) listed a ♀ specimen from Coahuila with a wing of 148.5 mm; although he called it *A. s. saxatalis*, it is *sclateri* in size. Behle (1973) has recently shown that northern Rocky Mountain birds overlap and grade into those of the southwestern United States, and he merges *sclateri* with *saxatalis*. While this merger appears justifiable, birds with wings of more than 145.0 mm are nevertheless shown to be from more northern breeding populations, i.e., Montana, Colorado, and central and northern Utah.

***Amazilia beryllina viola* (W. de W. Miller). Berylline Hummingbird**

SIN.: Rancho Carrizo—ad. ♀, 26 November; ad. ♂, 3 December; also (NF) ad. ♂, 8 December 1970; 2 ad. ♂♂, 17 December 1970

These records at 6000 feet are above listed upper limits of birds wintering in Sinaloa (i.e., 2500 ft.) reported in the Mexican Check-list.

***Amazilia violiceps ellioti* (Berlepsch). Violet-crowned Hummingbird**

DGO.: Río Mezquital—2 ♂♂, 1 ♀, 5–6 November

The Mexican Check-list mentions this species from western Durango without details and only in the general summation.

***Lampornis clemenciae clemenciae* (Lesson). Blue-throated Hummingbird**

COAH.: Puente El Chorro—4 ad. ♀♀, 1 ad. ♂, 13–14 May

The Mexican Check-list does not record this species from Coahuila; the ♀♀ were all at nests under highway bridges. Ely (pers. comm.) has found the species nesting near Las Vacas in caves and vacant buildings.

***Eugenes fulgens fulgens* (Swainson). Rivoli's Hummingbird**

SIN.: Rancho Carrizo—2 ad. ♀♀, 1 ad. ♀, 1–4 December

These birds were not in breeding condition, contrary to what one might expect from the Mexican Check-list, which indicates breeding-condition specimens were taken at nearby Rancho Batel on 25 November. Crossin saw 2 adult territorial ♂♂ at La Esperanza, Nuevo León, on

4–10 May, but was unable to collect them; the species is not listed in that state in the Check-list.

***Calothorax lucifer* (Swainson). Lucifer Hummingbird**

COAH.: Puente El Chorro—ad. ♀, 14 May

The Mexican Check-list does not record this species from Coahuila, but earlier van Tyne and Sutton (1937:43) and Burleigh and Lowery (1942:191) reported specimens from there; Ely (1962) considered the species common below 7500 ft. in the state and cited egg dates from 19 May to 25 July.

***Archilochus alexandri* (Bourcier and Mulsant). Black-chinned Hummingbird**

COAH.: Palo Blanco—1 ad. ♂, 2 ad. ♀♀, 10–12 May

The Mexican Check-list does not record this species from Coahuila; Burleigh and Lowery (1942:191) and Miller (1955) list earlier specimens from the state, and Urban (1959:469) more recent ones.

***Calypte costae* (Bourcier). Costa's Hummingbird**

SIN.: Rancho Carrizo—sub-ad. ♂, 8 November 1970; ♀?, 8 December 1970

The Mexican Check-list records only four specimens of this species from Sinaloa, at elevations of 1100 ft. or lower—versus 6000 ft. for those listed here (NF).

***Calypte anna* (Lesson). Anna's Hummingbird**

CHIH.: Río Valleses—2 ad. ♀♀, 24 and 27 October

COAH.: Palo Blanco—sub-ad. ♂, 16 December

The Mexican Check-list does not record this species from Chihuahua and Coahuila, and these specimens are the first reported from Mexico east of Sonora (see Phillips and Amadon, 1952). Zimmerman (1973) has published a recent sight record from Coahuila: a bird seen near Parras de la Fuente on 19 December 1972.

***Atthis heliosa morcomi* Ridgway. Heloise's Hummingbird**

SIN.: Rancho Carrizo—ad. ♂, 13 October; 4 ad. ♂♂, 30 November and 2 December; 1 ad. and 1 im. ♂, 10–11 April (all 2 g, fat none to light); also (NF) single ad. ♂♂, 4 April 1964, 11 December 1970, and 10 January 1970

Inasmuch as this species is reported to be rare in the area, we record these additional specimens as well as some weights. This form was described on the basis of two single vagrant ♀♀ (USNM), taken in the Huachuca Mountains, Arizona, on 2 July 1896 (Ridgway, 1898).

As pointed out by Phillips (1961), the characters of *A. h. margarthae* Moore (1937), from Rancho Batel, Sinaloa, are precisely those of *morcomi*—particularly the very small spots on the throat, the paler and reduced buff on the sides, and whiter underparts. Under the circumstances, we follow Phillips in placing Moore's name in the synonymy of *morcomi*.

After having seen and compared the type and paratype, we find it difficult to understand, first, how Moore could have insisted that *morcomi* more closely resembled nominate birds (type locality: Jalapa and Coatepec, Veracruz) and, second, how this erroneous assessment could have been accepted for so long.

***Selasphorus platycercus platycercus* (Swainson). Broad-tailed Hummingbird**

N.L.: La Esperanza—ad. ♀, 7 May

This specimen provides additional evidence of this species breeding in Nuevo León, as it had two burst follicles and a brood patch; in addition, a ♀ was observed building a nest at La Esperanza on 4–10 May.

***Stellula calliope* (Gould). Calliope Hummingbird**

CHIH.: Río Vallesa—im. ♂, 27 October

The Mexican Check-list does not record this species from Chihuahua.

***Chloroceryle americana* (Gmelin). Green Kingfisher**

*C. a. septentrionalis* (Sharpe)

COAH.: Puente El Chorro—2 ad. ♀ ♀, 14 May

The Mexican Check-list records only *C. a. hachisukai* Laubman from Coahuila, that being from the northern part of the state. Miller (1955) and Urban (1959:469-470) also list that form from the north, although the latter says that a specimen from near Múzquiz is “probably intermediate between *hachisukai* and *septentrionalis*.” Our two specimens are clearly *septentrionalis*, being bluish rather than brassy green above and having much less white in the wings and on the head than *hachisukai*.

*C. a. hachisukai* Laubman

DGO.: Tepehuanes—1 ♀, 2 ♂ ♂, 12–13 November

CHIH.: Río Vallesa—♀, 26 October

The Mexican Check-list records this form without comment from Chihuahua and from only two specimens (Tamazula, 2800 ft.) in Durango. Fleming and Baker (1963:284–285) record two additional Durango specimens, taken on the Río Mezquital at Nombre de Díos; they identified these as *C. a. septentrionalis*, but as our specimens are typical *hachisukai*, we question their determination.

***Sphyrapicus thyroideus nataliae* (Malherbe). Williamson's Sapsucker**

CHIH.: Mt. Mohinora—ad. ♀, 19 October

DGO.: Teneraca (21 km S, 12 km W)—ad. ♀, 27 November 1970 (NF)

The Mexican Check-list records only four other specimens from Chihuahua, and reports also appear few for Durango.

***Dendrocopos villosus intermedius* (Nelson). Hairy Woodpecker**

SIN.: Rancho Liebre (ca. 2 mi. NW of Palmito)—ad. ♀, 2 June 1964

The Mexican Check-list does not record this species from Sinaloa (specimen at NF).

***Sayornis phoebe* (Latham). Eastern Phoebe**

CHIH.: Parral—ad. ♀, 31 October (no fat, 20 g)

The Mexican Check-list records this species without details from Chihuahua, where it is doubtlessly rare.

***Sayornis nigricans* (Swainson). Black Phoebe**

CHIH.: Río Valles—♀, 26 December

DGO.: Río Nazas—♀, 10 December

COAH.: Palo Blanco—♀, ♂, 15 December

The implication in the Mexican Check-list is that this species is only a summer resident in the northern states, although these specimens indicate otherwise. At the Río Valles, Crossin also saw several other birds in the period 25–30 December.

The Mexican Check-list records breeding birds from Chihuahua and Durango as *S. n. semiatra* (Vigors), type locality fixed as Monterey, California. Southern Coahuila birds are attributed to the nominate race, type locality given only as the tableland of Mexico. In general, we can confirm this assessment in our breeding material. The adults from Palo Blanco, Coahuila, are closer to *nigricans*, while 1 from Chihuahua (Parral) and 7 from Durango (El Salto 2, Laguna Santiaguillo, Río Mezquital) are closer to *semiatra*. However, a series of 5 birds from the Río Nazas, Durango, definitely averages having more dark streaking on the crissum than *semiatra*, and we would call these intergrades toward *nigricans*. On geographic grounds, this is not unexpected as southern Coahuila birds are close to *nigricans*.

Actually, in specimens (DMNH, USNM) examined by us, the trend of intergradation between *semiatra* and *nigricans* is even more widespread. California birds generally have the crissum immaculately white or with a few concealed dark markings, while Arizona and New Mexico specimens are less often immaculate and sometimes even have the streaking quite visible and fairly extensive. Most Chihuahua and Durango specimens in our series are like Arizona and New Mexico *semiatra*, although as just mentioned the Río Nazas birds are more heavily marked. Another more heavily marked Durango specimen is a ♀ taken on the Río Mezquital on 7 November. It resembles the more heavily marked Río Nazas birds, while 7 other birds are *semiatra*.

***Sayornia saya saya* (Bonaparte). Say's Phoebe**

COAH.: Puente El Chorro—♀, 14 May

Not recorded in the Mexican Check-list as breeding in Coahuila, but this bird had laid and had a brood patch. Previous evidence of breeding in the state goes back to Burleigh and Lowery (1942:193), and recently Ely (pers. comm.) has found several nests near Las Vacas.

***Tyrannus verticalis* (Say). Western Kingbird**

DGO.: El Salto 2—ad. ♀, 26 May (heavy fat, 42 g)

Only one other Durango specimen is recorded in the Mexican Check-list; our specimen apparently represents a late migrant.

***Myiarchus cinerascens mexicanus* (Kaup). Ash-throated Flycatcher**

N.L.: La Esperanza—ad. ♀, 8 May (30 g, soft-shelled egg in oviduct; in pine-yucca forest at ca. 9000 ft.)

This species is not recorded from Nuevo León in the Mexican Check-list; the racial identification is provisional.

***Empidonax hammondii* (Xantus). Hammond's Flycatcher**

SIN.: Rancho Carrizo—♂, 2 ♀♀, 30 November–5 December (no fat, 8.5–11 g)

DGO.: Río Nazas—♀, 8 December (no fat, 11 g)

These are additional winter records, including the first specifically for Durango, according to the Mexican Check-list.

***Empidonax oberholseri* Phillips. Dusky Flycatcher**

CHIH.: Río Valles—♀, 27 December (heavy fat, 13 g)

The Mexican Check-list does not record this species in winter from Chihuahua. Also taken in winter were specimens from Sinaloa, Durango, and Coahuila. In spring this was the commonest *Empidonax* of this complex, being taken in these states and in Nuevo León as well.

***Empidonax wrightii* Baird. Gray Flycatcher**

DGO.: Río Nazas—2 ♀♀, 9–10 December

The Mexican Check-list does not record this species as wintering in Durango. Crossin took only one other specimen, a ♀ near Parral, Chihuahua, on 1 November.

***Empidonax affinis pulverius* Brewster. Pine Flycatcher**

SIN.: Rancho Carrizo—♀, 4 December

This species is said in the Mexican Check-list to winter only rarely in Sinaloa.

***Empidonax difficilis* Baird. Western Flycatcher**

The subspecific taxonomy of this species in western Mexico is still not well elucidated, and there are indications that the reviews to date (Moore, 1940a, 1940b) have confounded more than clarified the situation. Moore described three new races along a transect from the Sierra Madre Occidental to the Pacific lowlands, i.e., *immodulatus* (type locality: Mt. Mohinora, Chih., 10,500 ft.), *bateli* (type locality: Rancho Batel, Sin., 6200 ft.), and *culiacani* (type locality: Culiacán, Sin., 55 ft.).

According to Phillips (1959:362), *culiacani* is a synonym of *difficilis*, the type specimens being migrants in an area where the species is quite unknown as a breeder. Phillips et al. (1964:88) also consider that most or all of the type series of *immodulatus* are representatives of the race *hellmayri* Brodkorb, a breeding bird of the Rocky Mountains and south-



ward to northern Chihuahua and Coahuila. Whether the type is *hellmayri* or not, they do not state; however, we assume from the above and their placing *immodulatus* in quotes that it is indeed *hellmayri*. That leaves for consideration *E. d. bateli*, a name which the Mexican Check-list considers a synonym of *immodulatus*.

It is clear that *E. difficilis* breeds in eastern Sinaloa, and in fact the type of *bateli* was reportedly taken at a nest at Rancho Batel (Moore, 1940a). (Crossin also found a nest at nearby Rancho Liebre on 6 May 1964.) From Moore's description, *bateli* would appear to be a rather small, dark race (we have not seen the type). In our series of 12 spring specimens from Rancho Carrizo, all of the specimens are short-winged, i.e., 65.0–69.0 in ♂♂ and 63.0–65.5 in ♀♀. This makes them rather small for *hellmayri* but in the range of *bateli* (and *difficilis*). The series is quite variable in color, but three specimens stand out as being clearer (but not necessarily darker) green above and in having buffier wing bars and darker breasts than most of the other specimens (wings: ♂ 64.5; ♀♀ 64.0, 66.0 mm). Although not in breeding condition, these specimens may well represent the local breeding form (i.e., *bateli*), as they had no fat deposits—which would be expected in most migrants in mid-April. In addition, two autumn-winter birds from Rancho Carrizo are richly colored (♀♀, wings 63.5, 64.5 mm), plus two spring birds from near El Salto, Durango (♂ 65.5, ♀ 64.5 mm). These we would also call *bateli*. Thus, if our assessment is correct, *bateli* is a rather small and richly colored race, occurring at least from Rancho Batel into adjacent Durango. Based on this assessment, our specimens can be allocated as follows:

*E. d. bateli* Moore

DGO.: El Salto 2—♀, ♂, 21 and 24 May (ov. to 3 mm; t. 6 × 4; no fat)

SIN.: Rancho Carrizo—2 ♀♀, 29 November and 2 December; 2 ♀♀, 1 ♂, 9–10 April (ov. 5 × 3 and 5 × 2 mm, granular; t. 2 × 1.5 mm; no fat)

*E. d. difficilis* Baird

CHIH.: Río Santa Barbara—♀, 1 May (wing 60.5; ov. 3 × 3, granular; no fat)

DGO.: El Salto 2—♀, 25 May (wing 61.0; ov. 5 × 3, granular; no fat)

SIN.: Rancho Batel—4 ♀♀, 5 ♂♂, 6–12 April (ov. 3 × 2 to 4 × 2, granular; t. 1 × 1 to 2 × 1.5; fat none to light)

Concordia—♀, 15 April (wing 61.0 mm; ov. 4 × 2, granular; medium fat)

*E. d. hellmayri* Brodkorb

DGO.: El Salto 2—♂, 26 May (wing 72.0 mm; t. 6 × 5 mm; no fat)

***Camptostoma imberbe ridgwayi* (Brewster). Beardless Flycatcher**

CHIH.: Río Valles—♂, 28 October (no fat, light molt, 8 g)

The Mexican Check-list does not record this species from Chihuahua. Measurements are: wing 56.5, tail 49.0 mm.

***Hirundo pyrrhonota melanogaster* Swainson. Cliff Swallow**

DGO.: Río Nazas—series of breeding birds, 15–16 May ( $\delta \delta$  had testes at least  $6 \times 8$  mm;  $\text{♀} \text{♀}$  ranged from ovary enlarging to laying)

In this series, wing lengths of  $\text{♀} \text{♀}$  ranged 96.5–104.5 mm and of  $\delta \delta$  96.5–106.0 mm. Forehead colors in the series were rufous to dark brown, except for one bird that had this whitish; it had enlarged testes ( $11 \times 7$  mm), weighed 19.5 g (light fat), and had a wing of 105.0 mm.

***Riparia riparia riparia* (Linnaeus). Bank Swallow**

DGO.: Laguna de Santiaguillo— $\delta$ , 22 April

The Mexican Check-list does not record this species from Durango.

***Corvus corax* Linnaeus. Common Raven**

DGO.: Laguna de Santiaguillo—set of 5 fresh eggs, 23 April

The Mexican Check-list does not specifically record this species as breeding in Durango. White-necked Ravens (*C. cryptoleucus* Couch) also occurred at this locality, and a  $\text{♀}$  was taken on the same date (ova and ovary small).

***Auriparus flaviceps ornatus* (Lawrence). Verdin**

CHIH.: Río Santa Barbara—juv.  $\text{♀}$  and  $\delta$  (from nest), 30 April

COAH.: Palo Blanco—juv.  $\text{♀}$ , 12 May

These data provide additional breeding records from these states; others for Coahuila are listed by Amadon and Phillips (1947) and Urban (1959:481).

***Cistothorus platensis stellaris* (Naumann). Sedge Wren**

DGO.: Laguna de Santiaguillo— $\text{♀}$ , 21 April (no fat, medium molt)

According to the Mexican Check-list, this northern race is recorded in Mexico only from Tamaulipas and San Luís Potosí. This form is easily distinguished from more southern races by its streaked rump.

***Campylorhynchus brunneicapillus guttatus* (Gould). Cactus Wren**

CHIH.: Parral—2 juv.  $\text{♀} \text{♀}$ , 31 October (both in post-juv. molt)

These two fledglings represent later breeding than indicated in the Mexican Check-list.

***Troglodytes aedon cahooni* Brewster. House Wren**

DGO.: El Salto 2—series, including 2 incubating  $\text{♀} \text{♀}$ , 21–28 May

The Mexican Check-list records this form in Durango only from 50 miles south of Durango. Fleming and Baker (1963:294) list additional specimens from near El Salto, as well as other localities in the state.

***Salpinctes obsoletus obsoletus* (Say). Rock Wren**

COAH.: Palo Blanco— $\text{♀}$  (soft-shelled egg in oviduct), 4 juv., 10–13 May

The Mexican Check-list lists no breeding record of this species from Coahuila. Ely (pers. comm.) has nesting records (young) from there between 11 May and 25 June.

***Melanotis caerulescens caerulescens* (Swainson). Blue Mockingbird**

SIN.: Rancho Carrizo—series, 27 November–2 December and 6–7 April

The Mexican Check-list records this species as occurring only up to 5200 ft. in Sinaloa (at nearby Rancho Batel); the above were taken at 6000 ft. at a locality where it is common and has bred (egg dates, 25 May 1963 and 28 May 1964).

***Toxostoma curvirostre* (Swainson). Curve-billed Thrasher**

COAH.: Palo Blanco—3 ad. ♂♂, 14–16 December (fat none to light, 91–94 g)

The Mexican Check-list is unclear about the racial situation in this species in southern Coahuila. Compared to typical *T. c. celsum* Moore, two of these specimens are darker on the upperparts and in the ventral spotting; they may be called *T. c. oberholseri* Law. The third specimen is an intergrade, but is closer to *celsum*. Urban (1959:486) calls southern Coahuila birds *oberholseri*, while Ely (1962) says those of the southeastern part of the state are intermediate between that race and *celsum*—but closer to the latter.

***Toxostoma dorsale dumosum* Moore. Crissal Thrasher**

DGO.: Rio Mezquital—♂, 1 April (49 g, no fat, t. 4 × 3 mm)

Although worn, this specimen is clearly darker above and below and has a whiter throat than Arizona and New Mexico specimens of *T. d. dorsale* Henry. Moore (1941), in describing *dumosum* (from a single specimen taken at Portezuelo, Hidalgo), pointed out that the type was smaller than nominate birds. We can confirm this in our specimen, which measures as follows: wing 94, tail 122+, and culmen from nostril 27.4 mm. Five ♂♂ of the nominate race measure as follows: wings 99.5 to 102.5, tails 133+ to 136, and culmen 28.2 to 31.5 mm. Two DMNH *dumosum* from near Sombrerete, Zacatecas, are also dark and small (respective measurements: ♀ 91.5, 118+, 28.7; ♂ 93.5, 119+, 28.6), but in culmen they overlap *dorsale*.

The Mexican Check-list does not record *T. dorsale* from Durango, but Fleming and Baker (1963:295) report 1 taken 35 miles west of Mapimi on 1 July 1958. They identified their bird as the nominate race, but in light of our determination this may be questioned. Their specimen was made into a skeleton, but it still might be subspecifically identifiable on the basis of size.

***Catharus guttatus* (Pallas). Hermit Thrush**

*C. g. auduboni* (Baird)

CHIH.: Mt. Mohinora—♂, 18 October (wing 98.0)

Rio Santa Barbara—♂, 2 May (wing 98.5)

DGO.: El Salto 1—♂, ♀, 28 March (wings 103.0, 97.0)

SIN.: Rancho Carrizo—♂, 3 ♀♀, 26 November–3 December (wing 99.5; wings 95.5, 97.5, 98.0); ♂, ♀, 6 and 10 April (wings 101.5, 97.5)

N.L.: La Esperanza—2 ♀♀, 5–7 May (wings 95.0, 96.5)

*C. g. oromelus* (Oberholser)

DGO.: Río Nazas—♂, 8 December (wing 91.5)

SIN.: Rancho Carrizo—♀, 12 April (wing 86.0)

COAH.: Palo Blanco—♀, ♂, 12-14 December (wings 87.0, 91.5)

N.L.: La Esperanza—3 ♀♀, 5-9 May (wings 84.0, 88.0, 91.0)

CHIH.: 25 mi. W of Parral—♂, 26 April (wing 91.0)

*C. g. guttatus* (Pallas)

COAH.: Palo Blanco—♀, 14 December (wing 83.5)

This listing shows the distribution, dates of occurrence, and numbers taken of the three races identified in this sample of 21 specimens; *auduboni* (12 specimens) predominates, followed by *oromelus* (8) and *guttatus* (1). Taxonomy is according to Aldrich (1968) insofar as subspecies usage and recognition. We follow Dilger (1956) and others in placing all *Hylocichla* except *H. mustelina* in the genus *Catharus*. This decision is made easier by the fact that the type species of *Catharus*, *C. occidentalis*, is similar in behavior and morphology to the merged (non-*mustelina*) members of *Hylocichla*.

*Myadestes obscurus cinereus* Nelson. Brown-backed Solitaire

SIN.: Rancho Carrizo—2 ad. ♂♂, 1-2 December (no fat or molt; 37, 40 g)

In the Mexican Check-list the implication is that this species winters only at 700 to 2500 ft., but Rancho Carrizo is at 6000 ft.

*Sialia mexicana amabile* Moore. Western Bluebird

We can confirm the differences cited by Moore (1939) between this race and *bairdi* Ridgway. In our 6 ♂♂ of *amabile* from Durango and southern Chihuahua, the brown of the dorsum is darker, while below it is paler but more extensive. Also, in our series the blue of the throat and belly is paler than that of *bairdi* ♂♂. Females of *amabile* parallel ♂♂ in their color differences, but these are much less pronounced.

*Regulus calendula* (Linnaeus). Ruby-crowned Kinglet

Phillips' (1964) recent study shows that color characters among continental populations of this species do not substantiate the existence of a greenish nominate race in the east and north and a grayer race in the west, i.e., *cinerascens* Grinnell (type locality: Mt. Wilson, California). Instead, Phillips points out that eastern and northern birds differ from those of Arizona and probably most of the western United States in being shorter-winged. On this basis, he describes the race *R. c. arizonensis* (type locality: vicinity of Phelps Ranger Station, White Mountains, Arizona). The minimum wing length of *arizonensis* is said to be 60.4 mm in males and 56.3 (+?) in females, versus maxima of 60.0 and 58.0, respectively, in recently measured eastern birds. According to Phillips, the male that is the type of *cinerascens* measures 60.0 mm in wing length; therefore, he considers this form a synonym of *R. c. calendula*.

We find Phillips' basis for considering the type of *cinerascens* as measurably the same as *R. c. calendula* to be open to question. In the first place, the determination of whether the type represents a member of a short- or a long-winged population rests on less than a half millimeter—in a worn spring bird at that. Second, Phillips (1964:235) admits that two of the ♂♂ specimens from his series (DMNH) from the White Mountains measure less than the 60.4 mm given as the minimum of *arizonensis*. These we have seen, one measured by Phillips as 59.9 and the other as 59.5/60.4 mm; our measurements of them are both 59.5 mm. Phillips contends that these two specimens are probably migrants from farther north (they were taken on 14 and 17 September) and leaves them out of his measurements of *arizonensis*. Actually the two are in the final stages of molt, and like the six longer-winged September (8 to 23) specimens in the type series, they probably do represent local birds. We also measured summer topotypical ♂♂ of *arizonensis*; and while most exceed 60.4 mm in wing length, one taken on 2 July measures 59.5/60.0 (Phillips' figure 60.4).

The point is that minimum wing lengths in *arizonensis* include rather than exclude the type of *cinerascens*. As this is the case, and if a long-winged western race is to be recognized, it should bear the name *cinerascens*—with *arizonensis* a synonym. Before the question of a western race can be satisfactorily answered, we feel that more study is needed, particularly of measurements from populations across *all* of North America. Meanwhile, we think it best to accept Phillips' contention that no color races exist among continental populations of *R. calendula*; furthermore, we suggest that both *cinerascens* and *arizonensis* be synonymized with *calendula*, pending eventual clarification of mensural variation in continental populations. Should a longer-winged race be recognized, along mensural lines given by Phillips, our specimens could be segregated as follows (wing >60mm/<60mm): Chihuahua—10/6, Durango—2/6, Sinaloa—1/3, Coahuila—0/4, Nuevo León—0/1.

***Bombycilla cedrorum* Vieillot. Cedar Waxwing**

DGO.: Río Mezquital—3 ♀♀, 4 April (from flock of 50+)

The Mexican Check-list does not record this species from Durango.

***Vireo atricapillus* Woodhouse. Black-capped Vireo**

SIN.: Rancho Carrizo—♀, 12 April (no fat, 7 g)

The latest spring record for Sinaloa is 20 March, according to the Mexican Check-list.

***Vireo griseus micrus* Nelson. White-eyed Vireo**

CHIH.: Río Santa Barbara—♂, 28 April

The Mexican Check-list does not record this species from Chihua-

hua, nor is it reported from northern Mexico west of Coahuila and San Luis Potosí. The measurements are: wing 55.5 and tail 45.0 mm.

***Vireo huttoni* Cassin. Hutton's Vireo**

*V. h. carolinae* Brandt

N.L.: La Esperanza—2 ♀ ♀, 5-7 May (no fat, 12 g, brood patch)

The Mexican Check-list records no evidence of breeding of this species from Nuevo León.

*V. h. stephensi* Brewster

CHIH.: Mt. Mohinora—♂, 18 October (no fat, 12 g)

The Mexican Check-list does not record this form above 8500 ft., but this record is at 10,200 ft.

***Vireo bellii medius* Oberholser. Bell's Vireo**

DGO.: Río Nazas—♀, 16 May (egg in oviduct, brood patch)

CHIH.: Río Santa Barbara—2 ♀ ♀, 5-7 May (both with brood patches, one with egg in oviduct)

The Mexican Check-list does not record definite evidence of breeding of this species in these two states. Earlier, Amadon and Phillips (1947) reported a nest with young on the Río Nazas on 25 April 1946.

***Vireo solitarius* (Wilson). Solitary Vireo**

*V. s. solitarius* (Wilson)

COAH.: Palo Blanco—♂, 2 ♀ ♀, 12-16 December

The Mexican Check-list does not record this form from Coahuila; Urban (1959:492-493) lists one other specimen from the state.

*V. s. cassinii* Xantus

COAH.: Palo Blanco—♂, 12 December

DGO.: Laguna de Santiaguillo—2 ♂ ♂, 5 ♀ ♀, 19-24 April

The Mexican Check-list does not record this form from Coahuila; however, Van Hoose (1955) has reported a specimen taken there on 4 July 1954. Urban (1959:493) corrects the date given by Van Hoose to 4 April 1954 and adds one other Coahuila specimen to the record—a bird taken on 12 May 1954. Our Durango specimens represent late spring records from that state, where recorded in the Check-list only to 10 April.

***Peucedramus taeniatus* (Du Bus). Olive Warbler**

*P. t. arizonae* Miller and Griscom

CHIH.: Mt. Mohinora—3 ♂ ♂, 18-21 October

These are all adults with paler backs than more southern specimens (the 21 October specimen is somewhat darker, toward the next race).

*P. t. jaliscensis* Miller and Griscom

CHIH.: Mt. Mohinora—♀, 2 ♂ ♂, 17 and 21 October

DGO.: El Salto 2—♂ and 2 ♀ ♀ juv., 24 May (from nest 18 ft. up in a pine)

These records provide additional details on the distribution of the

two races in Chihuahua and an additional breeding record from Durango. The Mexican Check-list does not recognize *jaliscensis*, instead synonymizing it with the nominate form; on the contrary, we follow Webster (1958b, 1962) in regarding this as a valid subspecies.

The Olive Warbler has long been considered a member of the Parulidae, and still is by Webster (1962) and perhaps others. However, George (1962, 1968) has marshalled evidence that at least argues for the removal of *Peucedramus* from this family, if not in its placement near the Sylviidae. We shall not review the evidence, except to say that Webster's characters of the hard palate do not appear to us to maintain *Peucedramus* in the Parulidae. Hubbard has examined wood warbler (Parulidae) skulls (UMMZ) and is impressed with the homogeneity among typical members of the family, which is not shared with them by *Peucedramus*. Webster's (1962:420) own figure illustrates marked differences between a *Dendroica* and the Olive Warbler, in spite of his emphasis to the contrary. On the other hand, his contention that *Peucedramus* is not a sylviid is worth considering, and it may be a mistake to insert this genus into any extant family. A separate family or at least subfamily might be more appropriate.

***Mniotilta varia* (Linnaeus). Black-and-white Warbler**

DGO.: Río Nazas—♂, 9 December (no fat or molt, 10 g)

COAH.: Palo Blanco—♂, 16 December (light fat, no molt, 10 g)

SIN.: Rancho Carrizo—♂, 1 December (no fat or molt, 10 g)

These represent additional records from areas where the species is rarely reported. Other Coahuila records are given by Urban (1959:493).

***Vermivora virginiae* (Baird). Virginia's Warbler**

SIN.: Rancho Carrizo—♂, 10 April (no fat, 7 g)

This warbler is recorded as rare in Sinaloa in the Mexican Check-list.

***Vermivora crissalis* (Salvin and Godman). Colima Warbler**

At La Esperanza, Nuevo León, 4–10 May, Crossin found this species a frequent visitor at agave (*Agave* sp.) flowers, along with hummingbirds, *Icterus parisorum*, and other species, where it appeared to be taking nectar.

***Dendroica petechia* (Linnaeus). Yellow Warbler**

DGO.: Río Nazas—♂, 16 May (t.  $2 \times 2$  mm, heavy fat, 10.5 g)

Río Mezquital—6 ♂♂, 1–4 April (t.  $4 \times 4$  to  $6 \times 5$  mm, no fat, 8.5–9.5 g, several birds singing)

The first record is of *morcomi* Coale, and those from the Río Mezquital are *sonorana* Brewster, neither of which race is recorded in the Mexican Check-list from Durango. D. Miller (1906) attributed a ♂ and a ♀ from Río Sestín, taken 11 and 14 April 1903, to *sonorana*, although the ♀ was longer-winged than Arizona birds.

***Dendroica tigrina* (Gmelin). Cape May Warbler**

CHIH.: Parral—im. ♂, 1 November (no molt or fat, 9 g)

This is the first record from Mexico outside the Yucatan Peninsula, according to the Mexican Check-list.

***Dendroica coronata* (Linnaeus). Yellow-rumped Warbler**

*D. c. coronata* (Linnaeus)

DGO.: Laguna de Santiaguillo—♀ (wing 68.5 mm), im. ♂ (wing 76.0 mm), 14–15 November

Rio Nazas—♀ (wing 68.5 mm), 10 December

The Mexican Check-list records this form without details from Durango, where it appears to be quite rare. We have seen only one other specimen from there, an im. ♂ (wing 73.0 mm) taken at Rancho Guasimal, 6 mi. west of Birimoa, on 30 October 1937 (MC). Using characters given in Hubbard (1970), this specimen and the ♂ above cannot be attributed to a given population, but the 2 ♀♀ taken by Crossin are small and thus from the population breeding east of Alaska and the Yukon.

*D. c. nigrifrons* Brewster

We have seen breeding birds of this race from throughout western Chihuahua and from Durango southward to the El Salto area (including Las Rucias, La Ciudad, Las Adjuntas, Nievero, Cerro Prieto, and Hacienda El Coyote). These were taken in the period 21 March to 27 September. The only winter specimens that we have seen were from the Nevado de Colima, Jalisco, where W. B. Richardson took a ♀ and a ♂ on 8 and 14 December 1889 (BMNH). Other specimens from Nevado de Colima were taken by J. H. Batty, i.e. 7 ♂♂ on 10–27 September 1905 (AMNH).

In the Mexican Check-list, *nigrifrons* is reported to have been taken on 22 February at Nievero, Durango (MC). We could find no specimens of any form of *D. coronata* from Nievero on that date, either in the collection or the catalog, nor any winter specimen of *D. c. nigrifrons* from any locality. We assume an error was made, either in the data or the identification or both.

The Check-list records a specimen of *nigrifrons* from Xichú, Guajuato, on 20 April (= 7 mi. northwest of Xichú, ♂, 20 April 1939), but the bird is clearly *D. c. auduboni* (MC). Webster (1958a) has also erroneously ascribed a specimen of *D. c. auduboni* to *nigrifrons*, the bird in question being a ♀ taken 4 mi. south of Laguna Valderama, Zacatecas, on 24 September 1955 (CAS). To date we have confirmed *nigrifrons* only from Chihuahua and Durango (spring into autumn) and from Jalisco (autumn and winter). We would also like to point out that occasional *D. c. auduboni* occur in the mountains of western Mexico in summer; i.e., a first-year ♂ (already in post-nuptial molt) taken 12 mi. east of



La Junta, Chihuahua, on 12 June 1949, and a ♀ taken 4 mi. east of Uruapán, Michoacán, on 5 July 1939 (both MC).

***Seiurus aurocapillus cinereus* Miller. Ovenbird**

DGO.: Río Nazas—♀, ♂, 9 December (no molt or fat; s.n.o.; 14.0, 18.5 g)

The Mexican Check-list does not record this subspecies from Durango.

***Seiurus noveboracensis* (Gmelin). Northern Waterthrush**

DGO.: Río Nazas—♂, 10 December (no molt or fat, 17 g, s.n.o.)

Laguna de Santiaguillo—♂, 23 April (no fat, 16.5 g)

The Mexican Check-list does not record this species from Durango. We follow Eaton (1957) in not recognizing any races in this species.

***Wilsonia pusilla* (Wilson). Wilson's Warbler**

*W. p. pileolata* (Pallas)

COAH.: Palo Blanco—♀, 3 ♂♂, 12-15 December

The Mexican Check-list and Urban (1959) do not record this form as wintering in Coahuila; also found in winter in Durango on the Río Nazas (2 ♀♀, 3 ♂♂, 4-10 December).

*W. p. pusilla* (Wilson)

DGO.: Río Nazas—2 ♂♂, 8 December

Laguna de Santiaguillo—♀, ♂, 13-14 December

Río Mezquital—♀, 3 ♂♂, 5-8 November

CHIH.: Río Vallesa—♀, 25 October

Río Santa Barbara—♀, 2 ♂♂, 26-29 April

The Mexican Check-list does not record this race from Chihuahua and Durango.

***Setophaga ruticilla* (Linnaeus). American Redstart**

DGO.: Laguna de Santiaguillo—♂, 14 November (no molt or fat, s.n.o., 6 g); 2 ♂♂, 20-21 April (fat none to light, 7-8 g)

The Mexican Check-list does not record this species from Durango. We do not recognize any races in this species.

***Molothrus aeneus loyei* Parkes and Blake. Bronzed Cowbird**

DGO.: Presa Francisco Zarco—2 ♂♂, 17-19 May (no fat, 63 and 67 g, t. 10 × 7 and 12 × 10 mm)

According to the Mexican Check-list, this species is known from Durango only on the basis of sight records, these being near Mezquital on 26 July and near Durango on 21 June 1950 (Webster and Orr, 1952). Crossin observed several of these birds at the above locality, plus a few at the nearby Río Nazas on 15-18 May. These specimens are the easternmost of this western race that we know of from Mexico. We follow Parkes and Blake (1965) in placing *Tangavius* in *Molothrus*; this necessitated the renaming *T. a. milleri* van Rossem as given above.

***Molothrus ater* (Boddaert). Brown-headed Cowbird***M. a. obscurus* (Gmelin)

This is the breeding race of Mexico, including the northern Plateau. All spring cowbird specimens (11 taken 29 April–16 May) in our series from Chihuahua, Durango, and Coahuila are this form, based on measurements (see Table 1) and the slender bill. Only one *obscurus* was taken in the autumn (Río Vallesa, Chih.: im. ♀, 23 October), the rest of the series of 29 birds being the following race.

*M. a. artemisiae* Grinnell

CHIH.: Río Vallesa—12 ♂♂, 8 ♀♀, 22–28 October

DOGO.: El Salto 1–7 ♂♂, 2 ♀♀, 21 November

Based on measurements (Table 1), virtually all of the larger cowbirds collected in autumn can be assigned to this race (type locality: Quinn River Crossing, Humboldt Co., Nevada). The lone exception is a molting ♀ (Río Vallesa, 28 October), the bill width of which is 8.7 mm—which is somewhat wide for *artemisiae*. However, the bill is not particularly massive and we do not regard the bird as typical *M. a. ater*; perhaps it is an intergrade between that race and *artemisiae*. The other

**Table 1: Measurements of Brown-headed Cowbirds  
from Breeding Grounds\***

Samples	N	Wing length (mm)†			Culmen length (mm)‡			Mandible width (mm)†		
		$\bar{x}$	S.D.	Range	$\bar{x}$	S.D.	Range	$\bar{x}$	S.D.	Range
<b>Males</b>										
<i>artemisiae</i>										
Great Basin	20	112.1	2.7	107.0–118.0	12.3	0.5	11.4–13.0	9.1	0.4	8.5–9.6
Great Plains	20	111.6	2.8	107.0–117.0	12.2	0.5	11.1–12.9	9.2	0.3	8.7–9.8
<i>ater</i>										
Eastern U.S.	24	108.7	1.9	105.5–112.0	11.5	0.7	10.2–12.8	9.6	0.3	9.2–10.3
<i>obscurus</i>										
S. Arizona	11	100.5	1.7	98.0–103.5	10.6	0.8	9.7–12.1	8.1	0.3	7.7–8.6
<b>Females</b>										
<i>artemisiae</i>										
Great Basin	18	100.2	1.3	98.0–102.5	10.5	0.6	9.2–11.3	8.4	0.3	7.5–9.2
Great Plains	9	99.7	1.7	97.5–102.0	10.6	0.2	10.3–11.0	8.1	0.2	7.7–8.4
<i>ater</i>										
Eastern U.S.	22	97.5	2.4	92.0–101.5	10.3	0.4	9.7–11.1	8.8	0.2	8.4–9.2
<i>obscurus</i>										
S. Arizona	12	91.0	2.2	86.5–93.5	9.2	0.3	8.6–9.8	7.5	0.3	6.7–7.6

\* Specimens in USNM, MCZ, and DMNH.

† Measurements of subspecies significantly different in Mann-Whitney U tests (Steel and Torrie, 1960),  $P$  all  $< .05$  and often  $< .01$  (H:  $\bar{x}_1 = \bar{x}_2$ ); measured from nostril.

‡ Subspecies significantly different, except for Great Basin *artemisiae* and *ater* females, where  $P > .05$  (H:  $\bar{x}_1 = \bar{x}_2$ ); measured at base between rami.

specimens have bill widths generally in the range of *artemisiae*, i.e., 8.6–9.4 mm in ♂♂ and 7.4–8.4 mm in ♀♀ (culmen lengths 9.9–12.1 in ♂♂, 9.3–10.6 in ♀♀). Wing lengths of measurable specimens are: 5 ad. ♂♂ = 111.0–115.5; 3 im. ♂♂ = 106.0–110.0; 4 ad. ♀♀ = 103.0–109.0; 1 im. ♀ = 101.0 mm. These wing lengths are also in agreement with measurements of *artemisiae* (Table 1). All of the October specimens are in molt, while the November ones—except for one bird—have completed it.

***Cassidix mexicanus* (Gmelin). Boat-tailed Grackle**

OGO.: Río Nazas—3 ♀♀, 16–17 May (all with brood patches and burst follicles in the ovaries)

The Mexican Check-list reports this species without detail from Durango, but the above may be the first evidence of breeding there. The Check-list mentions specimens (MC—not seen) of the race *C. m. monsoni* (Phillips) from this state, but these from Río Nazas appear to be *monsoni* × *prosopidicola* (Lowery) in coloration and measurements. D. Miller (1906) reported winter specimens from Rosario and La Boquilla, calling them “*macrourus*.”

***Icterus spurius* (Linnaeus). Orchard Oriole**

CHIH.: Río Santa Barbara—5 ♂♂, 3 ♀♀, 29 April–2 May

OGO.: Laguna de Santiaguillo—2 ♂♂, 21 and 24 April

Río Nazas—1 ♂, 2 ♀♀, 15–17 May

We have tried to assess these specimens subspecifically on the basis of the revision of Mexican *I. spurius* by Dickerman and Warner (1962). They described as *I. s. phillipsi* (type locality: 1 mi. W of Acámbaro, Guanajuato) the breeding birds from central Durango and southward, while considering those from northeasternmost Durango and northward to be the nominate race. The latter is regarded as including *I. s. affinis* Lawrence, a population of smaller birds occurring in southern Texas and adjacent Mexico. *Phillipsi* is said to differ from *spurius* in having the juveniles paler below and grayer above and the adult ♂♂ darker chestnut. *Phillipsi* is further differentiated from adjacent *spurius* (i.e., “*affinis*”) in having the wing and tail longer; there is clearly no significant difference in these measurements between *phillipsi* and U.S. *spurius*, although the average in tail length in ♂♂ of the latter is smaller, i.e., 67–73 versus 70–79 in *phillipsi*.

None of our series of ♂♂ is darker than the darkest of a series of six eastern U.S. *spurius*, nor do any of the specimens of ♂♂ or ♀♀ exceed the maximum tail length of *spurius* (including “*affinis*”). Therefore, we would call them all *I. s. spurius* on the basis of color and measurements. This is not particularly surprising, as our material could well be transient *spurius* en route from wintering grounds in Pacific Mexico—where the species winters in numbers as far north as Nayarit and Sinaloa

(Phillips, 1961)—to the eastern United States. Some could also be "*affinis*" on or near its breeding grounds (particularly those with short wings or tails), and thus distinguishable from more eastern *spurius*. These would include ♂♂ from Río Santa Barbara (wing 75.5 mm) and Río Nazas (wing 73.5 mm). If breeding, the latter specimen, a bird with testes  $9 \times 6$  mm, no fat, and taken on 15 May, would apparently be the first definite record of "*affinis*" in northeastern Durango. (The map of Dickerman and Warner [1962] shows northeastern Durango shaded to indicate the occurrence of "*affinis*," but the only record shown is a circle rather than a dot; we assume that the former is a sight record and the latter a specimen, a distinction that is not made in the paper.) Two ♀♀ taken there at the same time have enlarged ovaries ( $7 \times 3$  and  $9 \times 4$ , ova to 3 mm) and no fat deposits; their wings (both 72.0 mm) are near the lower limit of the two larger populations and could well refer them to "*affinis*."

Dickerman and Warner (1962) also show a dot in Sinaloa on their map of breeding ranges, perhaps referring to the specimen (MC—not seen) cited in the Mexican Check-list (Culiacán, 17 June), but they do not supply a name for it. To the north, in Sonora, we have seen several specimens that could represent breeding birds; these are all the size of "*affinis*." These specimens (DMNH) are ♂♂ as follows: 9 mi. N of Ciudad Obregón, 28 June 1959, t.  $9 \times 6$ , no fat (wing 74.6); 3 mi. NNE and 1 mi. WNW of Navajoa, 27 April 1957, t.  $4 \times 3$ , slight fat (wing 71.0); essentially same locality, same date, t.  $7 \times 4$ , slight fat (wing 70.0).

#### *Icterus cucullatus* Swainson. Hooded Oriole

CHIH.: Río Santa Barbara—♀, 29 April (ov.  $4 \times 3$ , gran.; no fat; 19 g)

The Mexican Check-list records this species (as the race *I. c. nelsoni* Ridgway) from Chihuahua without details. This specimen is similar in color to that race, but it is small (wing 76.5, tail 77.5 mm). It might represent the population of smaller birds of southern Sonora, called *I. c. restrictus* van Rossem; this form is considered a synonym of *nelsoni* in the Check-list. This species would appear rare on the Plateau in Chihuahua and in Durango.

#### *Icterus parisorum* Bonaparte. Scott's Oriole

SIN.: Rancho Carrizo—♂, ♀, 4 December and 29 November (no molt, fat none to light, 33 and 40 g, s.o. and s.n.o.); ad. ♂, 1 March 1964 (NF)

In the Mexican Check-list, this species is said to winter in the tropical lowlands, but these records are at 6000 ft. in oak woodland.

#### *Icterus galbula* (Linnaeus). Northern Oriole

CHIH.: Parral—4 ♂♂ (t.  $5 \times 9$ , enlarged cloacal protuberance;  $8 \times 12$ ;  $6 \times 12$ , enl. cl. prt.; and  $8 \times 14$ . No fat)

DGO.: Laguna de Santiaguillo—2 ♂♂ (t.  $8 \times 12$  and  $8 \times 13$ . No fat)

In view of the fact that *I. g. bullockii* (Swainson) and *I. g. abeillei* (Lesson) intergrade on the Mexican Plateau, the characteristics of the above probable breeding birds are of interest. The Mexican Check-list indicates that intergradation between these forms occurs in northern Durango (MC specimens), but does not specify localities. Rising (1970) indicated that an intergrade population existed at Río Sestín (= Santa María del Oro), in northern Durango, based on a series of birds collected by F. H. Batty. Interestingly, Rising (1973) has reported that he recently (30 April to 5 May 1971) attempted without success to find orioles of these forms in north-central Durango.

The four males from Parral are very close to *I. g. bullockii*, but each shows some approach to *abeillei* in one or more characters, i.e., darkened rump, darkened sides, black forehead, and/or shortened superciliary stripe. One of the males from Laguna de Santiaguillo is essentially like *bullockii* but shows an approach to *abeillei* exceeding that of any of the Parral specimens. It has distinctly darkened rump and flanks, as well as a black forehead. The other Durango male is essentially intermediate, with much darkened rump, black on the sides, forehead, and auriculars, and with a shortened superciliary line.

***Icterus wagleri wagleri* Sclater. Wagler's Oriole**

DGO.: Río Mezquital—2 ad. ♂♂, 2-3 April (no fat, both 42 g, 4 × 3 and 3 × 2 mm)

This species is said in the Mexican Check-list to be resident in the highlands (although implied of seasonal shifts), but these two were taken in *Taxodium-Salix* habitat at 5400 ft.

***Icterus pustulatus microstictus* Griscom. Scarlet-headed Oriole**

SIN.: Rancho Carrizo—♀, 27 November (no molt or fat, s.n.o., 34.5 g)

DGO.: Río Mezquital—♀, ♂, 2-3 April (no fat, 26 [= 36?] and 40 g, ov. 7 × 5 mm, t. 3 × 2 mm)

This species is said in the Mexican Check-list to be resident in tropical zone, but the above Sinaloa record is at 6000 ft. (in oak woodland); it is recorded in the Check-list without detail from Durango (the above records are from 5400 ft.).

***Piranga flava hepatica* (Swainson). Hepatic Tanager**

SIN.: Rancho Carrizo—3 ad. ♂♂, im. ♂, im. ♀, 29 November—5 December; sub-ad. ♂, 9 December 1970

The Mexican Check-list does not record this species in Sinaloa in winter.

***Piranga ludoviciana* (Wilson). Western Tanager**

DGO.: El Salto 2—♂, ♀, 24 and 26 May (no and heavy fat, 27 and 33 g)

The Mexican Check-list does not record this species in Durango in spring.

*Spinus psaltria* (Say). Lesser Goldfinch

We concur with Phillips et al. (1964) in reverting back to a subspecific nomenclature more like that in Ridgway (1901) than in the Mexican Check-list and most other current literature. This would mean that the name *S. p. psaltria* (type locality fixed at Colorado Springs, Colorado) would apply to all populations with green or mixed green and black backs in adult ♂♂, the reason being that toptotypical birds are primarily of these types. Synonyms are *S. p. hesperophilus* (Oberholser), type locality San Bernardino, California, and *S. p. arizonae* (Coues), type series from Ft. Whipple, Arizona, and Ft. Wingate, New Mexico. The earliest available name for northern black-backed (adult ♂) populations is *mexicanus* Swainson (Real del Monte, Hidalgo, Mexico). Birds of the latter form range into the U.S. in southern Texas, with at least occasional variants of *S. p. psaltria* that are black-backed enough to be indistinguishable from *mexicanus* occurring as far north as southern Arizona, New Mexico, and eastern Colorado.

In Mexico, green-backed or intergrade specimens (MC) are said in the Check-list to have been taken on the Plateau southwest to northwestern Chihuahua (La Junta), and apparently as a vagrant to Durango (Guanceví). The La Junta specimens are not, however, from the locality west of Chihuahua, i.e., in "northwestern" (= central-western) Chihuahua. According to Chester Lamb's field notes (MC), this La Junta is in the southwestern part of the state, at the junction (i.e., *junta*) of the Río Chinipas and Río Fuerte, just north of Choix, Sinaloa. Thus these green-backed or intergrade specimens extend the range of *psaltria* even farther, and Crossin took an intermediate ♂ even beyond that—in southwestern Durango—at the Río Mezquital on 4 November (four others from there, taken 3–7 November, are quite close to *mexicanus*, but have some green mottling on the back). He also took two typical *psaltria*, along with an intergrade, on the Río Vallesa, Chihuahua, on 23–28 October.

All of the preceding Crossin specimens are post-breeding and could be migrants, but we suspect that they reflect the pattern of plumage variation that exists on the northern Plateau, i.e., green-backed or intergrade birds in the north gradually giving way to black-backed birds in the south. In spring, we have series of birds that are close to *mexicanus* (some with green mottling on the back) as follows: 7 ♂♂ from Laguna de Santiaguillo (15–17 May) and single ♂♂ from the Río Nazas, Durango (24 April), and Palo Blanco, Coahuila (12 May). The Mexican Check-list records the black-backed race at several localities in Durango, as well as in "southern" (= central) Chihuahua at Chihuahua and Carmen (= Ricardo Flores Magón; cf. Anderson, 1972). Urban (1959:505) and Ely (pers. comm.) also record black-backed specimens from Coahuila.

Oberholser (1903) and others suggest that ♂♂ in some black-backed populations of *S. psaltria*, the back may be green for some time before becoming fully black. We have examined specimens from black-backed populations of Mexico (DMNH) and do not find this to be the case; in the specimens that we have seen, young ♂♂ molt from green to black backs in the prenuptial molt. Whether this holds true in all populations remains to be seen, but we suspect that it is—Oberholser notwithstanding.

***Cardinalis sinuatus sinuatus* Bonaparte. Pyrrhuloxia**

COAH.: Palo Blanco—juv. ♂ and 2 ♀♀, 11 May (from nest 7 ft. up in mesquite)

DGO.: Presa Francisco Zarco—♀, 19 May (15 mm ovum in oviduct)

These represent early-in-the-season breeding records. D. Miller (1906) also records breeding in May in Durango, at Rancho Baillón.

***Pheucticus ludovicianus* (Linnaeus). Rose-breasted Grosbeak**

DGO.: Río Mezquital—sub-ad. ♂, 31 March (no fat, light molt)

The Mexican Check-list does not record this species from Durango nor from anywhere else in northwestern Mexico.

***Pheucticus melanocephalus* (Swainson). Black-headed Grosbeak**

*P. m. melanocephalus* was taken in the spring in Chihuahua, Nuevo León, and Durango, and at Rancho Carrizo, Sinaloa, on 26 November, 4 December, and 7–10 April. *P. m. maculatus* (Audubon) was taken only in spring and at the last locality, comprising four of seven specimens from there in early April.

***Guiraca caerulea eurhyncha* Coues. Blue Grosbeak**

DGO.: Río Mezquital—juv. ♀, 6 November

This represents late-in-the-season breeding; the specimen is full-grown and in the post-juvénal molt.

***Passerina amoena* (Say). Lazuli Bunting**

DGO.: Río Mezquital—series, 3–8 November

The Mexican Check-list records this species from Durango without comment. In the series are six adults that have completed the molt and one that is in the last stages; one immature is in light and two are in heavy molt.

***Passerina versicolor* (Bonaparte). Varied Bunting**

DGO.: Río Mezquital—2 ad. and 1 im. ♂♂, 4–8 November

These represent additional specimens of this species from Durango, where recorded in the Mexican Check-list from Nombre de Diós (nominative form) and the extreme northwestern part of the state (*P. v. dickcyeae* van Rossem). Our immature ♂ is rich brown and we presume it—as well as the two adults—to be *dickcyeae*.

***Passerina ciris pallidior* Mearns. Painted Bunting**

DGO.: Río Nazas—2 ad. ♀ ♀, 9 December

The Mexican Check-list does not record this species from Durango.

***Spiza americana* (Gmelin). Dickcissel**

DGO.: Laguna de Santiaguillo—♂, 18 November (no molt or fat, 29 g, s.n.o.)

The Mexican Check-list does not record this species from Durango.

***Atlapetes virenticeps verecundus* (Moore). Green-striped Atlapetes**

SIN.: 7 mi. NNE of Rancho Carrizo—2 ♂ ♂, 11 April (no fat, t. 7 × 6 mm; 39 and 40 g)

This species was taken only at 6200 ft. in a deep, dark, permanently watered barranca and was decidedly rare. Only three specimens are listed from Sinaloa in the Mexican Check-list—all from nearby Rancho Batel.

***Pipilo fuscus* Swainson. Brown Towhee**

*P. f. potosinus* Ridgway

N.L.: La Esperanza—juv. ♀, 5 May (no fat, 37 g)

The Mexican Check-list records this form as breeding only in late July in Nuevo León.

*P. f. perpallidus* van Rossem

DGO.: El Salto 2—ad. ♀ ♀, 23 May (brood patch, just finished laying)

CHIH.: Parral—juv. ♂, 31 October

In the Mexican Check-list, breeding of this form is listed as June and August in Durango and May–August in Chihuahua; the above juvenile is full-grown and in the post-juval molt. D. Miller (1906) also records breeding in Durango in May.

*P. f. mesoleucus* Baird

CHIH.: Buenaventura—2 ♀ ♀, 27 December

Represo El Tintero—♀, 22 December

These specimens extend the range of this race southward slightly in Chihuahua, based on information given in the Mexican Check-list. They show a slight approach to *P. f. perpallidus*, which is paler, grayer, and slightly smaller than *mesoleucus* (van Rossem, 1934).

***Ammodramus sandwichensis* (Gmelin). Savannah Sparrow**

Three races were present in the large series taken at Laguna de Santiaguillo, Durango, 14–18 November and 19–24 April. Most common were *A. s. nevadensis* (Grinnell) and *A. s. anthinus* (Bonaparte), and the former also taken at Represo El Tintero, Chihuahua, on 22–24 December. Also present at Laguna de Santiaguillo was *A. s. "rufofuscus"* (Camras), with seven taken in the period 15–18 November and a larger series from 19–24 April (the latter mainly in light to heavy molt). Crossin noted that "*rufofuscus*" stayed mainly in the wetter grassy areas near the lake, while the paler types (*nevadensis* and *anthinus*) were more in



the dry uplands. The race *anthinus* is not recorded in the Check-list from Durango. We regard *rufofuscus* as a synonym of *brunnescens* Butler, for reasons given in Hubbard (1974).

***Pooecetes gramineus confinis* Baird. Vesper Sparrow**

Winter specimens were taken in Chihuahua (Represo El Tintero and Río Valles), where reported only in September in the Mexican Check-list. Two of these specimens ( $\delta \delta$ , 24 and 26 December) are rather darker and redder above and have heavier dorsal streaking; these may represent *P. g. altus* Phillips. *Confinis* was also taken in Durango during migration (15–16 November and 4–22 April), the localities being Laguna de Santiaguillo and the Río Mezquital.

***Aimophila ruficeps* (Cassin). Rufous-crowned Sparrow**

***Aimophila ruficeps phillipsi* new subspecies**

Type DMNH 13,198, adult female, collected at Rancho Carrizo,  $6\frac{1}{2}$  miles west of Palmito, Sinaloa, on 28 November 1971, by Richard S. Crossin (collector's number 5072).

DIAGNOSIS: This is a very dark race, much darker than the two contiguous ones, i.e., *simulans* (type locality: Mina Abundancia, Sonora) to the north and east and so-called *fusca* Nelson (type locality: Ezatlán, Jalisco) to the south in Nayarit (where actually an undescribed race occurs). In fresh plumage, *phillipsi* differs from *simulans* in having the ground color of the upperparts darker and more grayish brown (near Broccoli Brown [capitalized colors from Ridgway, 1886]); the dorsal streaking and crown darker, less reddish brown (between dark Walnut Brown and Seal Brown); the wings and tail darker, redder brown; the breast and sides of head darker, more grayish brown (Broccoli Brown); and the flanks and crissum darker. Size is similar, but *simulans* is slightly shorter in wing and tail. Compared to Nayarit "*fusca*," *phillipsi* has the ground color of the upperparts darker and grayer (less reddish), the dorsal streaking and crown darker and browner (much less reddish), the wings and tail darker and redder brown, the breast and sides of head darker and grayer, and the flanks and crissum darker. Size of two is similar.

MEASUREMENTS: type—wing 58.5+ (molting), tail 60.5, culmen from nostril 8.1 mm, weight 18 g.; 10 males (mean, standard deviation, range)—wing  $60.4 \pm 1.6$  (58.0–62.0), tail  $62.9 \pm 3.0$  (57.0–66.5), culmen/nostril  $8.2 \pm 0.5$  (7.4–9.1) mm, weight  $19.3 \pm 1.8$  (17.0–21.8) g; 4 females (including type)—wing  $57.6 \pm 2.1$  (55.0–60.0), tail  $60.6 \pm 1.3$  (59.5–62.5), culmen/nostril  $8.5 \pm 0.4$  (8.1–9.0) mm, weight  $19.2 \pm 1.6$  (18.0–21.0) g. (Note: Sample size of 10 males and 4 females does not necessarily mean that each measurement was computable from the full sample size for a given sex.)

RANGE: This distinctive, dark race appears to be limited to the barranca country on the western slopes of the Sierra Madre Occidental, in southeastern Sinaloa. It is known only from the area 6 to 15 miles west of Palmito, including Rancho Batel and Rancho Labor del Cielo. One specimen (MC) from northeastern Sinaloa (Milpillars area) shows intergradation between this race and *simulans*, although the remainder of the series from there is closer to that race than to *phillipsi*.

ETYMOLOGY: Named for our friend Allan Robert Phillips.

SPECIMENS EXAMINED: *phillipsi*—14, *simulans*—14 in fresh plumage, Nayarit "*fusca*"—6 in fresh plumage.

*A. r. simulans* van Rossem

CHIH.: Río Vallesa—5 ♂ ♂, 4 ♀ ♀, 24–28 October

DGO.: Tepehuanes—♂, ♀, 12 November

This series is in fresh to partly fresh plumage, with some specimens still in postnuptial or postjuvenile molt. Compared to six *simulans* from Sonora, adjacent Chihuahua, and Sinaloa, our series agrees well in coloration in six specimens; the other five have the ground color of the back distinctly paler and grayer. In addition, our series averages browner (less reddish) in dorsal streaking, and the breast and flanks are grayer (less buffy) than in most of the *simulans*. However, the latter are variable inter se, and three of the specimens are inseparable from over half (6 of 11) of our series. On this basis, we feel that our specimens are best assigned to *simulans*, although the tendency toward grayness and browner streaking could indicate intergradation with other races. For example, some of the birds approach *A. r. scottii* (Sennett) (type locality: Pinal County, Arizona) in the color of the dorsal streaking, and the grayness might also indicate some relationship with that form. We should note that the above series of *simulans* was collected between 1935 and 1956, and some of the differences between those specimens and our series are the type that foxing would produce.

*A. r. eremoeca* (Brown) × *pallidisima* Phillips

COAH.: Palo Blanco—♂, ♀, 15–16 December; ♀, 12 May

Puente El Chorro—3 ♀ ♀, 3 ♂ ♂, 12–14 May

Compared to similarly plumaged topotypes of *pallidisima* (type locality: Cuesta Blanca, 19 km W of Saltillo, Coahuila) and near-topotypes of *eremoeca* (type locality: Boerne, Kendall County, Texas), our two December specimens are essentially intermediate. Our May birds appear closer to *pallidisima*; but because they are worn, we cannot confidently identify them at this time. We regard *A. r. tenuirostra* Burleigh and Lowery (type locality: McKittrick Canyon, Guadalupe Mountains, Culberson County, Texas) as an intergrade population between *A. r. scottii* and *A. r. eremoeca*.

***Aimophila cassinii* (Woodhouse). Cassin's Sparrow**

COAH.: Palo Blanco—♂, 2 ♀ ♀, 12-14 December (light molt, fat none to light, 18-19 g)

The Mexican Check-list does not record this species in Coahuila in winter, the latest date being 20 November.

***Junco hyemalis* (Linnaeus). Dark-eyed Junco**

*J. h. caniceps* (Woodhouse)

CHIH.: Río Vallesa—4 ♀ ♀, 27-28 October

The Mexican Check-list gives no specimen records of this form from Chihuahua. At the same locality and date, an adult ♀ *caniceps* × *mearnsi* was taken, the bird being dorsally like *caniceps* and ventrally like *mearnsi*.

*J. h. mearnsi* Ridgway

CHIH.: Río Vallesa—♀, 28 October

DGO.: Tepehuanes—♀, 12 November

The Mexican Check-list does not record this form from southern Chihuahua nor from Durango. The Chihuahua bird is slightly darker above and on the sides and has more rufous wing edgings than the Durango specimen, but both are typical of the race.

***Spizella passerina* (Bechstein). Chipping Sparrow**

As would be expected, the race *S. p. arizonae* Coues was found as a widespread migrant and wintering bird on the northern Plateau, with winter specimens from Chihuahua (Represo El Tintero), Sinaloa (Rancho Carrizo), Durango (Río Nazas), and Coahuila (Palo Blanco). The darker and dorsally more heavily streaked *S. p. atremaeus* Moore was found in Chihuahua (Río Vallesa, 24 and 28 October), Sinaloa (Rancho Carrizo, 28 November and 1 December), and Durango (El Salto area, 22 November, 25-26 March, and 23-28 May). Birds closely resembling this race were also found at lower elevations in Durango, one on the Río Nazas (8 December) and one at Laguna de Santiaguillo (4 November). The May series from El Salto represents breeding *atremaeus*, with a ♀ collected at nest and one taken with enlarged oviduct and laying on 23 May. This series is rather variable in color of the upperparts, with five birds being as pale as some *arizonae* and the other five being darker; all are more broadly streaked above than typical *arizonae*.

***Spizella pallida* (Swainson). Clay-colored Sparrow**

DGO.: Río Mezquital—2 ♀ ♀, 8-10 November

Laguna de Santiaguillo—2 ♀ ♀, 13-16 November; 3 ♀ ♀, 19-23

April

COAH.: Palo Blanco—♀, 2 ♂ ♂, 12-16 December

These records are listed in view of the apparent decline in numbers farther north, e.g., in Arizona (Phillips *et al.*, 1964).

***Zonotrichia leucophrys* (Forster). White-crowned Sparrow**

The Mexican Check-list records this species from Chihuahua and Durango without details on specimens. Crossin collected a series there in the periods 30 October–28 December and 31 March–29 April, with *Z. l. leucophrys* (includes *Z. l. oriantha* Oberholser, cf. Banks, [1964]) by far the predominant form. These were taken at Parral in Chihuahua and at Laguna de Santiaguillo, Río Nazas, and Río Mezquital in Durango. In addition, three immature *Z. l. gambelii* (Nuttall) were taken, recognizable by their whitish lores and paler, more yellowish (versus dusky) bills, compared to *leucophrys*. Two of these were taken on the Río Valles, Chihuahua (26–28 December), and one at Laguna de Santiaguillo, Durango (13 November). The Mexican Check-list lists only one other specimen of this race from Durango and gives no data on the relative proportions of races in Chihuahua.

***Melospiza lincolni lincolni* (Audubon). Lincoln's Sparrow**

A dozen winter specimens were taken in Chihuahua (Río Valles, 28 December), Sinaloa (Rancho Carrizo, 2–3 December), Durango (Río Nazas, 9 December), and Coahuila (Palo Blanco, 13 December). These vary from dark brown to light grayish brown, with various intermediates. Otherwise found to be a numerous migrant (equally variable in color), with the latest specimen taken from near El Salto, 25 May. We follow Phillips *et al.* (1964) in synonymizing *alticola* (Miller and McCabe) with the nominate race.

***Melospiza georgiana ericrypta* Oberholser. Swamp Sparrow**

- DGO.: Laguna de Santiaguillo—♀, ♂, 14–15 November; series, 19–24 April  
 Río Nazas—♂, 11 December  
 CHIH.: Río Santa Barbara—♂, 30 April  
 Río Vallesa—♂, 26 October

The Mexican Check-list does not record this species from these states, and the only other record given from northwestern Mexico is from Sonora; the latter is apparently based on a record of one seen near Caborca by Phillips and Amadon (1952). All of the autumn and winter birds had unossified skulls.

***Melospiza melodia montana* Henshaw. Song Sparrow**

- CHIH.: Río Valles—♂, 3 ♀♀, 27–28 December

The Mexican Check-list records this as an occasional winter visitant to northwest Chihuahua. All of these birds had ossified skulls.

## SUMMARY

Among the records reported here are several of species that are rare or unusual anywhere in the northern Mexican Plateau–Sierra Madre

Occidental region. These include breeding records of *Otus flammeolus* (Nuevo León) and *Asio otus* (Nuevo León), specimens of *Calypte anna* (Chihuahua, Coahuila), *Aix sponsa* (Durango), *Cistothorus platensis* (Durango), *Dendroica tigrina* (Chihuahua), *Spiza americana* (Durango), and *Melospiza georgiana* (Chihuahua, Durango), and sight records of *Mergus serrator* (Chihuahua) and *Buteo brachyurus* (Sinaloa).

Additional first records, according to the Mexican Check-list are as follows (forms marked with an asterisk are known from a state on the basis of other published reports): Chihuahua—*Coragyps atratus* (sight), *Buteo regalis* (sight), \**Otus asio*, *Stellula calliope*, *Camptostoma imberbe*, *Vireo griseus*, *Wilsonia p. pusilla*, *Icterus cucullatus*, *Junco c. caniceps*; Durango—*Aechmophorus occidentalis* (sight), *Pelecanus erythrorhynchus* (sight), *Phalacrocorax olivaceus* (sight), *Chen caerulescens* (sight), *Anser albifrons* (sight), \**Accipiter cooperii*, *Pandion haliaetus* (sight), *Limnodromus scolopaceus*, *Calidris minutilla*, *Recurvirostra americana* (sight), *Aegolius acadicus*, *Riparia r. riparia*, \**Toxostoma dorsale*, *Bombycilla cedrorum*, *Dendroica petechia sonorana*, *D. p. morcomi*, *Seiurus aurocapillus cinereus*, *S. noveboracensis*, *Wilsonia p. pusilla*, *Setophaga ruticilla*, *Molothrus aeneus* (first specimens), *Pheucticus ludovicianus*, *Passerina ciris*, *Junco hyemalis mearnsi*; Sinaloa—*Otus flammeolus*, \**O. trichopsis*, *Dendrocopos villosus*; Coahuila—\**Lampornis clemenciae* (breeding), \**Calothorax lucifer*, *Chloroceryle americana septentrionalis*, \**Vireo solitarius cassinii*, \**V. s. solitarius* (also first breeding of *Charadrius vociferus*, *Sayornis saya*); Nuevo León—*Myiarchus cinerascens* (breeding).

In addition, taxonomic comments are given for *Callipepla squamata*, *Zenaida asiatica*, *Aeronautes saxatalis* (and *A. s. sclateri* is added to the Mexican list, i.e., in Coahuila and Durango), *Atthis heliosa*, *Sayornis nigricans*, *Empidonax difficilis*, *Toxostoma dorsale*, *T. curvirostre*, *Sialia mexicana*, *Regulus calendula*, *Peucedramus taeniatus*, *Molothrus ater*, *Icterus spurius*, *Spinus psaltria*, *Ammodramus sandwichensis*, and *Aimophila ruficeps*; in the last species, *A. r. phillipsi* is described as a new race from Sinaloa. Finally, habitat and altitudinal data are given for certain species, while records are cited for a number of species whose numbers have declined, i.e., *Anas diazi*, *Coragyps atratus*, *Cathartes aura*, *Falco peregrinus*, *Rhynchopsitta pachyrhyncha*, and *Spizella pallida*.

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